

# UNITED STAT DEPARTMENT OF COMMERCE United Stat s Patent and Trad mark Office

United Stat s Patent and Irad mark Oπice
Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

FIRST NAMED INVENTOR ATTORNEY DOCKET NO APPLICATION NO. FILING DATE 09/058,810 04/13/98 **NEGELE** U 225/44173 **EXAMINER** IM52/0522 EVENSON MCKEOWN EDWARDS & LENAHAN CHEN. V 1200 G STREET NW **ART UNIT** PAPER NUMBER SUITE 700 18 WASHINGTON DC 20005 1773 DATE MAILED: 05/22/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

# Office Action Summary

Application No. 09/058,810

App\_\_nt(s

NEGELE et al

Examiner

Vivian Chen

Art Unit



The MAILING DATE of this communication appear	ars on the cover sheet with the correspondence address
Period for Reply	
A SHORTENED STATUTORY PERIOD FOR REPLY IS S THE MAILING DATE OF THIS COMMUNICATION.	
<ul> <li>Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this commu</li> </ul>	7 CFR 1.136 (a). In no event, however, may a reply be timely filed
<ul> <li>If the period for reply specified above is less than thirty (30) do be considered timely.</li> </ul>	ays, a reply within the statutory minimum of thirty (30) days will
- If NO period for reply is specified above, the maximum statuto	ry period will apply and will expire SIX (6) MONTHS from the mailing date of this
	by statute, cause the application to become ABANDONED (35 U.S.C. § 133). the mailing date of this communication, even if timely filed, may reduce any
Status	
1) Responsive to communication(s) filed on <u>2-28-0</u>	
	action is non-final.
3) Since this application is in condition for allowand closed in accordance with the practice under Ex	ee except for formal matters, prosecution as to the merits is parte Quayle, 1935 C.D. 11; 453 O.G. 213.
Disposition of Claims	
4) 💢 Claim(s) <u>28-50</u>	is/are pending in the application.
4a) Of the above, claim(s)	is/are withdrawn from consideration.
5) Claim(s)	is/are allowed.
6) 💢 Claim(s) <u>28-50</u>	is/are rejected.
7)	is/are objected to.
8) Claims	are subject to restriction and/or election requirement.
Application Papers	
9) The specification is objected to by the Examiner.	
10) The drawing(s) filed on is/a	are objected to by the Examiner.
11) The proposed drawing correction filed on	is: a) □ approved b) □ disapproved.
12) The oath or declaration is objected to by the Exa	
Priority under 35 U.S.C. § 119	
13) 💢 Acknowledgement is made of a claim for foreign	priority under 35 U.S.C. § 119(a)-(d).
a) $\square$ All b) $\square$ Some* c) $\square$ None of:	
1. 🔀 Certified copies of the priority documents h	ave been received.
2. Certified copies of the priority documents h	ave been received in Application No
3. Copies of the certified copies of the priority application from the International Bu *See the attached detailed Office action for a list of	
14) Acknowledgement is made of a claim for domes	
Attachment(s)	,
15) Notice of References Cited (PTO-892)	18) Interview Summary (PTO-413) Paper No(s).
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal Patent Application (PTO-152)
17) Information Disclosure Statement(s) (PTO-1449) Paper No(s).	20)  Other:

Art Unit: 1773

#### **DETAILED ACTION**

1. Claims 1-27 have been cancelled.

## Specification

2. The amendment filed 6/8/2000 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the newly added limitation precluding conjugated double bonds. Negative limitations to amend claims around the prior art constitute new matter if not supported by the specification. *Ex Parte Grasselli*, 231 USPQ 393.

Applicant is required to cancel the new matter in the reply to this Office action.

### Claim Rejections - 35 USC § 112

3. Claims 28-50 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention for the reasons stated above in the objection under 35 U.S.C. 132 of the amendment filed 6/8/2000. Applicant should point out with specificity any alleged support for the amended claim language.

Art Unit: 1773

4. The rejections of claim 44 under 35 USC 112, first paragraph, in paragraph 2 of the previous Office Action have been withdrawn in view of Applicant's arguments regarding a typographical error during the translation of the priority document.

#### Response to Arguments

- 5. Applicant's arguments filed 2/28/2001 have been fully considered but they are not persuasive.
- (A) Applicant argues that the disclosure as originally filed provides implicit support for the negative limitation "with exception of conjugated double bonds", relying upon the Negele declaration. However, while the declaration and Applicant contends that one of ordinary skill in the art would clearly recognize from the specification and the list of preferred compounds with conjugated double bonds are undesirable and to be excluded, the Examiner is not persuaded. As admitted by the Negele declaration, one of the compounds explicitly disclosed in the specification as a preferred material is sorbic acid, which contains double bonds which alternate with single bonds this meets the commonly recognized definition of "conjugated double bonds". Although sorbic acid may not be as prone to undergoing a Diels-Alder reaction as other compounds containing conjugated double bonds, it must be noted that the claims do not specify the exclusion of compounds capable of undergoing a Diels-Alder reaction, but rather the present claims require the flat exclusion of compounds containing conjugated double bonds in any form. It is the

Art Unit: 1773

Examiner's position that the specification does not clearly provide, either explicitly or implicitly, adequate support for the exclusion of compounds with conjugated double bonds, and that one of ordinary skill in the art would *not* reasonably infer from the disclosure (as originally filed) that compounds with conjugated double bonds must be avoided, particularly since the specification explicitly discloses a preferred material which in fact contains conjugated double bonds, as commonly recognized by those of ordinary skill in the art. The fact that the other functional groups in sorbic acid might materially affect its reactivity in regards to a Diels-Alder reaction (e.g., sorbic acid does not undergo a Diels-Alder reaction) is irrelevant.

Additionally, it is also unclear to the Examiner how the declared conjugation of the  $\alpha,\beta$ -double bond with the carboxylate group in sorbic acid would result in the  $\gamma,\delta$ -double bond acting as an isolated double bond. It would appear that sorbic acid (2,4-hexadienoic acid) should have 2,4-double bonds (double bonds between the 2nd and 3rd carbons, and between the 4th and 5th carbons), not 1,3-double bonds as stated by the Negele Declaration (paragraph 5) or a  $\alpha,\beta$ -double bond in combination with a  $\gamma,\delta$ -double bond.

However, if the Negele declaration is referring to a resonance structure in which contains an  $\alpha.\beta$ -double bond and a  $\gamma.\delta$ -double bond, the Examiner notes that the  $\alpha.\beta$ -double bond and the

Art Unit: 1773

 $\gamma$ ,  $\delta$ -double bond are *still* conjugated and that the  $\gamma$ ,  $\delta$ -double bond does not appear to be isolated as the Negele declaration indicates (see figure below).

#### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 1773

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (703) 305-3551. The examiner can normally be reached on Monday-Thursday from 8:30 AM to 6:00 PM and on alternate Fridays from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Paul Thibodeau, can be reached on (703) 308-2367.

For Art Unit 1773, the fax phone numbers are as follows:

official faxes:	unofficial faxes:
(703) 305-3601	(703) 305-5436
(703) 305-7718	(703) 305-3602

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is (703) 308-0661.

VC May 18, 2001

> Vivian Chen Primary Examiner Group 1700

N-ch